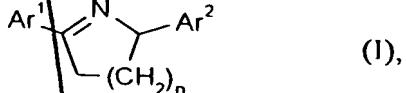


Patent Claims

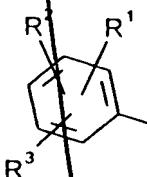
Sub A3
1. Compounds of the formula (I)



in which

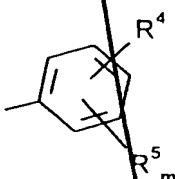
n represent 1, 2 or 3,

Ar^1 represents the radical



and

Ar^2 represents the radical



10

in which

m represents 0, 1, 2, 3 or 4,

R^1 represents halogen, cyano, nitro, alkyl, alkoxy, halogenoalkyl, halogenoalkoxy, alkoxyalkyl, $-\text{S}(\text{O})_n\text{R}^6$ or $-\text{NR}^7\text{R}^8$,

R^2 and R^3 independently of one another each represent hydrogen, halogen, cyano, nitro, alkyl, alkoxy, halogenoalkyl, halogenoalkoxy, alkoxy-alkyl, $-S(O)_oR^6$ or $-NR^7R^8$

R^4 represents halogen, cyano, trialkylsilyl, $-CO-NR^{10}R^{11}$, tetrahydropyranyl or one of the groupings below

- $\begin{matrix} 5 \\ \text{B} \end{matrix}$
- (l) $-X-A$
 - (m) $-B-Z-D$
 - (n) $-Y-E$,

R^5 represents hydrogen, halogen, cyano, nitro, alkyl, alkoxy, halogenoalkyl, halogenoalkoxy, alkoxyalkoxy or $-S(O)_oR^6$,

o represents 0, 1 or 2,

R^6 represents alkyl or halogenoalkyl,

R^7 and R^8 independently of one another each represent hydrogen or alkyl, or together represent alkylene,

15 R^{10} and R^{11} independently of one another each represent hydrogen, alkyl, halogenoalkyl or represent phenyl or phenylalkyl, each of which is optionally mono- or polysubstituted by radicals from the list W^1 ,

20 X represents a direct bond, oxygen, sulphur, carbonyl, carbonyloxy, oxycarbonyl, alkylene, alkenylene, alkinylene, alkyleneoxy, oxyalkylene, thioalkylene, alkylenedioxy or di-alkylsilylene,

25 A represents phenyl, naphthyl or tetrahydronaphthyl, each of which is optionally mono- or polysubstituted by radicals from the list W^1 , or represents 5- to 10-membered heterocyclyl having one or more hetero atoms from the group consisting of nitrogen, oxygen and sulphur and containing 1 or 2 aromatic rings, which is optionally mono- or polysubstituted by radicals from the list W^2 ,

B represents p-phenylene which is optionally mono- or disubstituted by radicals from the list W¹,

Z represents oxygen or sulphur,

D represents hydrogen, alkyl, alkenyl, alkinyl, halogenoalkyl, halogenoalkenyl, respectively optionally halogen-, alkyl-, alkenyl-, halogenoalkenyl-, phenyl-, styryl-, halogenophenyl- or halogenostyryl-substituted cycloalkyl or cycloalkylalkyl, represents respectively optionally halogen- or alkyl-substituted cycloalkenyl or cycloalkenylalkyl, represents respectively optionally nitro-, halogen-, alkyl-, alkoxy-, halogenoalkyl- or halogenoalkoxy-substituted phenylalkyl, naphthylalkyl, tetrahydronaphthylalkyl or 5- or 6-membered hetarylalkyl having 1 or 2 hetero atoms from the group consisting of nitrogen, oxygen and sulphur, represents -CO-R¹², -CO-NR¹³R¹⁴, or represents the grouping

15 -(CH₂)_p-(CR¹⁵R¹⁶)_q-(CH₂)_r-G or

Z and D together represent optionally nitro-, halogen-, alkyl-, alkoxy-, halogenoalkyl- or halogenoalkoxy-substituted phenoxyalkyl,

20 Y represents a direct bond, oxygen, sulphur, carbonyl, carbonyloxy, oxycarbonyl, alkylene, alkenylene, alkinylene, alkyleneoxy, oxyalkylene, thioalkylene, alkylenedioxy or represents p-phenylene which is optionally mono- or disubstituted by radicals from the list W¹,

25 E represents hydrogen, alkyl, alkenyl, alkinyl, halogenoalkyl, halogenoalkenyl, respectively optionally halogen-, alkyl-, alkenyl-, halogenoalkenyl-, phenyl-, styryl-, halogenophenyl- or halogenostyryl-substituted cycloalkyl, represents respectively optionally halogen- or alkyl-substituted cycloalkenyl, represents phenyl which is optionally mono- to tetrasubstituted by radicals from the list W¹ or represents 5- or 6-membered hetaryl having 1 or 2 hetero atoms from the group consisting of nitrogen, oxygen and sulphur, which is

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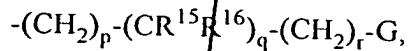
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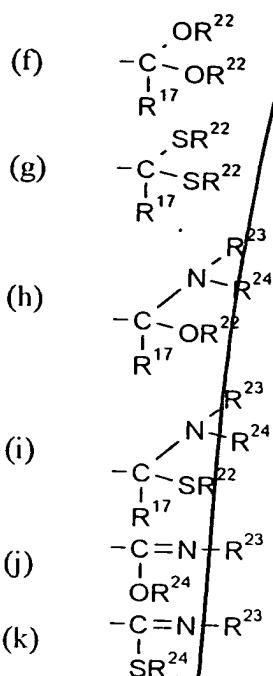
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optionally mono- to tetrasubstituted by radicals from the list W², or represents the grouping



- 5 R¹² represents alkyl, alkoxy, alkenyl, alkenyloxy, respectively optionally halogen-, alkyl-, alkenyl-, halogenoalkyl- or halogenoalkenyl-substituted cycloalkyl, cycloalkyloxy or cycloalkylalkyloxy or represents respectively optionally nitro-, halogen-, alkyl-, alkoxy-, halogenoalkyl- or halogenoalkoxy-substituted phenyl or naphthyl,
- R¹³ represents hydrogen or alkyl,
- 10 R¹⁴ represents alkyl, halogenoalkyl, respectively optionally halogen-, alkyl-, alkenyl-, halogenoalkyl- or halogenoalkenyl-substituted cycloalkyl, cycloalkylalkyl or represents respectively optionally halogen-, alkyl-, alkoxy-, halogenoalkyl- or halogenoalkoxy-substituted phenyl or phenylalkyl,
- 15 p, q and r independently of one another each represent 0, 1, 2 or 3, their sum being smaller than 6,
- R¹⁵ and R¹⁶ independently of one another each represent hydrogen or alkyl,
- 20 G represents cyano, represents a 5- or 6-membered heterocycle having 1 to 3 identical or different hetero atoms from the group consisting of nitrogen, oxygen and sulphur, which is optionally substituted by halogen, alkyl or halogenoalkyl and, at the attachment point, optionally by the radical R¹⁷, or represents one of the groupings below
- 25 (a) -CO-R¹⁷
 (b) -CO-OR¹⁸
 (c) -CO-NR¹⁹R²⁰
 (d) -CS-NR¹⁹R²⁰
 (e) -C=N-R²¹
 |
 R¹⁷



AB
S

- R^{17} represents hydrogen, alkyl, alkenyl, halogenoalkyl, halogenoalkenyl, optionally halogen-, alkyl- or halogenoalkyl-substituted cycloalkyl, or represents phenyl which is optionally mono- to pentasubstituted by alkylcarbonylamino, alkylcarbonylalkylamino and/or radicals from the list W^3 ,
- R^{18} represents hydrogen, alkyl, alkenyl, halogenoalkyl, halogenoalkenyl, respectively optionally halogen-, alkyl- or halogenoalkyl-substituted cycloalkyl or cycloalkylalkyl or represents arylalkyl which is optionally mono- to pentasubstituted by radicals from the list W^3 ,
- R^{19} and R^{20} independently of one another each represent hydrogen, alkyl, alkenyl, halogenoalkyl, halogenoalkenyl, alkoxy, respectively optionally halogen-, alkyl- or halogenoalkyl-substituted cycloalkyl or cycloalkylalkyl, represent aryl or arylalkyl, each of which is optionally mono- to pentasubstituted by radicals from the list W^3 , represent $-\text{OR}^{18}$ or $-\text{NR}^{17}\text{R}^{18}$ or together represent an alkylene chain having 2 to 6 members in which one methylene group is optionally replaced by oxygen,
- R^{21} represents $-\text{OR}^{18}$, $-\text{NR}^{17}\text{R}^{18}$ or $-\text{N}(\text{R}^{17})\text{-COOR}^{18}$,

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R^{22} , R^{23} and R^{24} independently of one another each represent alkyl,

5 W^1 represents hydrogen, halogen, cyano, formyl, nitro, alkyl, trialkylsilyl, alkoxy, halogenoalkyl, halogenoalkoxy, halogenoalkenyl, alkylcarbonyl, alkoxy carbonyl, pentafluorothio or $-S(O)_nR^6$,

10 W^2 represents halogen, cyano, formyl, nitro, alkyl, trialkylsilyl, alkoxy, halogenoalkyl, halogenoalkoxy, alkylcarbonyl, alkoxy carbonyl, pentafluorothio, $-S(O)_nR^6$ or $-C(R^{17})=N-R^{21}$,

15 W^3 represents halogen, cyano, nitro, alkyl, alkoxy, halogenoalkyl, halogenoalkoxy, dialkylamino $-S(O)_nR^6$, $-COOR^{25}$ or $-CONR^{26}R^{27}$,

20 R^{25} represents hydrogen, alkyl, halogenoalkyl, optionally halogen-, alkyl- or halogenoalkyl-substituted cycloalkyl or represents phenyl which is optionally mono- to pentasubstituted by radicals from the list W^4 ,

25 R^{26} and R^{27} independently of one another each represent hydrogen, alkyl, alkenyl, halogenoalkyl, halogenoalkenyl, alkoxy, respectively optionally halogen-, alkyl- or halogenoalkyl-substituted cycloalkyl or cycloalkylalkyl or represent aryl or arylalkyl, each of which is optionally mono- to pentasubstituted by radicals from the list W^4 , represent $-OR^{22}$ or $-NR^{23}R^{24}$ or together represent an alkylene chain having 2 to 6 members in which one methylene group is optionally replaced by oxygen, and

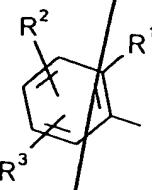
30 W^4 represents halogen, cyano, nitro, alkyl, alkoxy, halogenoalkyl, halogenoalkoxy, dialkylamino, alkoxy carbonyl, dialkylaminocarbonyl or $-S(O)_nR^6$.

35 2. Compounds of the formula (I) according to Claim 1 in which

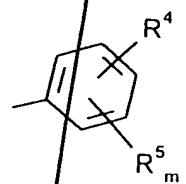
40 n represents 1, 2 or 3,

45 Ar^1 represents the radical

- 98 -



Ar^2 represents the radical



m represents 0, 1, 2 or 3,

5 R^1 represents halogen, cyano, nitro, $\text{C}_1\text{-}\text{C}_6$ -alkyl, $\text{C}_1\text{-}\text{C}_6$ -alkoxy, $\text{C}_1\text{-}\text{C}_6$ -halogenoalkyl or $\text{C}_1\text{-}\text{C}_6$ -halogenoalkoxy, represents $\text{C}_1\text{-}\text{C}_6$ -alkoxy- $\text{C}_1\text{-}\text{C}_6$ -alkyl, $-\text{S}(\text{O})_0\text{R}^6$ or $-\text{NR}^7\text{R}^8$,

10 R^2 and R^3 independently of one another each represent hydrogen, halogen, cyano, nitro, $\text{C}_1\text{-}\text{C}_6$ -alkyl, $\text{C}_1\text{-}\text{C}_6$ -alkoxy, $\text{C}_1\text{-}\text{C}_6$ -halogenoalkyl or $\text{C}_1\text{-}\text{C}_6$ -halogenoalkoxy, represent $\text{C}_1\text{-}\text{C}_6$ -alkoxy- $\text{C}_1\text{-}\text{C}_6$ -alkyl, $-\text{S}(\text{O})_0\text{R}^6$ or $-\text{NR}^7\text{R}^8$,

15 R^4 represents a substituent in meta- or paraposition from the group consisting of halogen, cyano, tri-($\text{C}_1\text{-}\text{C}_6$ -alkyl)-silyl, $-\text{CO-NR}^{10}\text{R}^{11}$, tetrahydropyranyl or one of the groupings below

(l) $-\text{X-A}$

(m) $-\text{B-Z-D}$

(n) $-\text{Y-E}$,

20 R^5 represents hydrogen, halogen, cyano, nitro, $\text{C}_1\text{-}\text{C}_{16}$ -alkyl, $\text{C}_1\text{-}\text{C}_{16}$ -alkoxy, $\text{C}_1\text{-}\text{C}_6$ -halogenoalkyl, $\text{C}_1\text{-}\text{C}_6$ -halogenoalkoxy, $\text{C}_1\text{-}\text{C}_8$ -alkoxy- $\text{C}_1\text{-}\text{C}_8$ -alkoxy or $-\text{S}(\text{O})_0\text{R}^6$,

o represents 0, 1 or 2,

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A3

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R⁶ represents optionally fluorine- or chlorine-substituted C₁-C₆-alkyl,

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R⁷ and R⁸ independently of one another each represent hydrogen or C₁-C₆-alkyl, such as, for example, methyl, ethyl, n-propyl, isopropyl, n-butyl, isobutyl, sec-butyl, tert-butyl or together represent C₂-C₅-alkylene, such as, for example, -(CH₂)₄- or -(CH₂)₅-.

R¹⁰ and R¹¹ independently of one another each represent hydrogen, C₁-C₆-alkyl, C₁-C₆-halogenoalkyl or represent phenyl or phenyl-C₁-C₄-alkyl, each of which is optionally mono- to trisubstituted by radicals from the list W¹,

W¹⁰
W¹³

X represents a direct bond, oxygen, sulphur, carbonyl, carbonyloxy, oxycarbonyl, C₁-C₄-alkylene, C₂-C₄-alkenylene, C₂-C₄-alkinylene, C₁-C₄-alkyleneoxy, C₁-C₄-oxyalkylene, C₁-C₄-thioalkylene, C₁-C₄-alkylenedioxy or di-C₁-C₄-alkylsilylene,

15

A represents phenyl, naphthyl or tetrahydronaphthyl, each of which is optionally mono- to tetrasubstituted by radicals from the list W¹, or represents 5- to 10-membered heterocyclyl having 1 to 4 heteroatoms, including 0 to 4 nitrogen atoms, 0 to 2 oxygen atoms and 0 to 2 sulphur atoms, and containing 1 or 2 aromatic rings, which is in each case optionally mono- to tetrasubstituted by radicals from the list W²,

20

B represents p-phenylene which is optionally mono- or disubstituted by radicals from the list W¹,

Z represents oxygen or sulphur,

25

D represents hydrogen, C₁-C₁₆-alkyl, C₂-C₁₆-alkenyl, C₂-C₆-alkinyl, C₁-C₁₆-halogenoalkyl, C₂-C₁₆-halogenoalkenyl, respectively optionally halogen-, C₁-C₄-alkyl-, C₂-C₄-alkenyl-, C₂-C₄-halogenoalkenyl-, phenyl-, styryl-, halogenophenyl- or halogenostyryl-substituted C₃-C₈-cycloalkyl or C₃-C₈-cycloalkyl-C₁-C₆-alkyl, represents respectively optionally halogen- or C₁-C₄-alkyl-substituted C₅-C₈-

5 cycloalkenyl or C₅-C₈-cycloalkenyl-C₁-C₄-alkyl, represents respectively optionally nitro-, halogen-, C₁-C₆-alkyl-, C₁-C₆-alkoxy-, C₁-C₆-halogenoalkyl- or C₁-C₆-halogenoalkoxy-substituted phenyl-C₁-C₆-alkyl, naphthyl-C₁-C₆-alkyl, tetrahydronaphthyl-C₁-C₆-alkyl or 5- or 6-membered hetaryl-C₁-C₆-alkyl having 1 or 2 hetero atoms from the group consisting of nitrogen, oxygen and sulphur, represents -CO-R¹², -CO-NR¹³R¹⁴, or represents the grouping

-(CH₂)_p-(CR¹⁵R¹⁶)_q-(CH₂)_r-G or

10 Z and D together represent optionally nitro-, halogen-, C₁-C₆-alkyl-, C₁-C₆-alkoxy, C₁-C₆-halogenoalkyl- or C₁-C₆-halogenoalkoxy-substituted phenoxy-C₁-C₄-alkyl,

A3

15 Y represents a direct bond, oxygen, sulphur, carbonyl, carbonyloxy, oxycarbonyl, C₁-C₄-alkylene, C₂-C₄-alkenylene, C₂-C₄-alkinylene, C₁-C₄-alkyleneoxy, C₁-C₄-oxyalkylene, C₁-C₄-thioalkylene, C₁-C₄-alkylenedioxy or represents p-phenylene which is optionally mono- or disubstituted by radicals from the list W¹,

20 E represents hydrogen, C₁-C₁₆-alkyl, C₂-C₁₆-alkenyl, C₂-C₆-alkinyl, C₁-C₁₆-halogenoalkyl, C₂-C₁₆-halogenoalkenyl, optionally halogen-, C₁-C₄-alkyl-, C₂-C₄-alkenyl-, C₂-C₄-halogenoalkenyl-, phenyl-, styryl-, halogenophenyl- or halogenostyryl-substituted C₃-C₈-cycloalkyl, represents optionally halogen- or C₁-C₄-alkyl-substituted C₅-C₈-cycloalkenyl, represents phenyl which is optionally mono- to tetrasubstituted by radicals from the list W¹ or represents 5- or 6-membered hetaryl having 1 or 2 hetero atoms from the group consisting of nitrogen, oxygen and sulphur, which is optionally mono- to tetrasubstituted by radicals from the list W², or represents the grouping

-(CH₂)_p-(CR¹⁵R¹⁶)_q-(CH₂)_r-G,

25 R¹² represents C₁-C₁₂-alkyl, C₁-C₁₂-alkoxy, C₂-C₁₂-alkenyl, C₂-C₁₂-alkenyloxy, respectively optionally halogen-, C₁-C₄-alkyl-, C₂-C₄-

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5 alkenyl-, C_1-C_4 -halogenoalkyl- or C_2-C_4 -halogenoalkenyl-substituted C_3-C_8 -cycloalkyl, C_3-C_8 -cycloalkyloxy or C_3-C_8 -cycloalkyl- C_1-C_6 -alkyloxy or represents phenyl or naphthyl, each of which is optionally mono- to tetrasubstituted by nitro, halogen, C_1-C_{12} -alkyl, C_1-C_{12} -alkoxy, C_1-C_{12} -halogenoalkyl or C_1-C_{12} -halogenoalkoxy,

R¹³ represents hydrogen or C_1-C_{12} -alkyl,

10 R¹⁴ represents C_1-C_{12} -alkyl, C_1-C_{12} -halogenoalkyl, respectively optionally halogen-, C_1-C_4 -alkyl-, C_2-C_4 -alkenyl-, C_1-C_4 -halogenoalkyl- or C_2-C_4 -halogenoalkenyl-substituted C_3-C_8 -cycloalkyl or C_3-C_8 -cycloalkyl- C_1-C_6 -alkyl, or represents phenyl or phenyl- C_1-C_6 -alkyl which is in each case optionally mono- to tetrasubstituted by halogen, C_1-C_{12} -alkyl, C_1-C_{12} -alkoxy, C_1-C_{12} -halogenoalkyl or C_1-C_{12} -halogenoalkoxy,

15

AB3

p, q and r independently of one another each represent 0, 1, 2 or 3, their sum being smaller than 6,

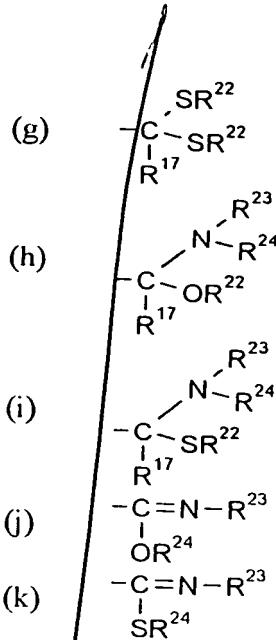
R¹⁵ and R¹⁶ independently of one another each represent hydrogen or C_1-C_4 -alkyl,

20

G represents cyano, represents a 5- or 6-membered heterocycle having 1 to 3 identical or different hetero atoms from the group consisting of nitrogen, oxygen and sulphur, which is optionally mono- to trisubstituted by halogen, C_1-C_4 -alkyl or C_1-C_4 -halogenoalkyl and, at the attachment point, optionally by the radical R¹⁷, or represents one of the groupings below:

25

- (a) $-CO-R^{17}$
- (b) $-CO-OR^{18}$
- (c) $-CO-NR^{19}R^{20}$
- (d) $-CS-NR^{19}R^{20}$
- (e) $-C=N-R^{21}$
 $\quad |$
 $\quad R^{17}$
- (f) $-C(OR^{22})_2$
 $\quad |$
 $\quad R^{17}$



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 R^{17}

represents hydrogen, $\text{C}_1\text{-}\text{C}_6$ -alkyl, $\text{C}_2\text{-}\text{C}_6$ -alkenyl, $\text{C}_1\text{-}\text{C}_4$ -halogenoalkyl, $\text{C}_2\text{-}\text{C}_6$ -halogenoalkenyl, optionally halogen-, $\text{C}_1\text{-}\text{C}_4$ -alkyl- or $\text{C}_1\text{-}\text{C}_4$ -halogenoalkyl-substituted $\text{C}_3\text{-}\text{C}_6$ -cycloalkyl, or represents phenyl which is optionally mono- to pentasubstituted by $\text{C}_1\text{-}\text{C}_4$ -alkylcarbonylamino, $\text{C}_1\text{-}\text{C}_4$ -alkylcarbonyl- $\text{C}_1\text{-}\text{C}_4$ -alkylamino and/or radicals from the list W^3 ,

 R^{18}

15

represents hydrogen, $\text{C}_1\text{-}\text{C}_4$ -alkyl, $\text{C}_2\text{-}\text{C}_6$ -alkenyl, $\text{C}_1\text{-}\text{C}_4$ -halogenoalkyl, $\text{C}_2\text{-}\text{C}_6$ -halogenoalkenyl, respectively optionally halogen-, $\text{C}_1\text{-}\text{C}_4$ -alkyl- or $\text{C}_1\text{-}\text{C}_4$ -halogenoalkyl-substituted $\text{C}_3\text{-}\text{C}_6$ -cycloalkyl or $\text{C}_3\text{-}\text{C}_6$ -cycloalkyl- $\text{C}_1\text{-}\text{C}_4$ -alkyl or represents $\text{C}_6\text{-}\text{C}_{10}$ -aryl- $\text{C}_1\text{-}\text{C}_4$ -alkyl which is optionally mono- to tetrasubstituted by radicals from the list W^3 ,

20

25

R^{19} and R^{20} independently of one another each represent hydrogen, $\text{C}_1\text{-}\text{C}_4$ -alkyl, $\text{C}_3\text{-}\text{C}_6$ -alkenyl, $\text{C}_1\text{-}\text{C}_4$ -halogenoalkyl, $\text{C}_3\text{-}\text{C}_6$ -halogenoalkenyl, $\text{C}_1\text{-}\text{C}_4$ -alkoxy, respectively optionally halogen-, $\text{C}_1\text{-}\text{C}_4$ -alkyl- or $\text{C}_1\text{-}\text{C}_4$ -halogenoalkyl-substituted $\text{C}_3\text{-}\text{C}_6$ -cycloalkyl or $\text{C}_3\text{-}\text{C}_6$ -cycloalkyl- $\text{C}_1\text{-}\text{C}_4$ -alkyl, represent phenyl or phenyl- $\text{C}_1\text{-}\text{C}_4$ -alkyl, each of which is optionally mono- to pentasubstituted by radicals from the list W^3 , represent $-\text{OR}^{18}$ or $-\text{NR}^{17}\text{R}^{18}$ or together represent an alkylene chain having 4 to 6 members in which one methylene group is optionally replaced by oxygen,

R²¹ represents -OR¹⁸, -NR¹⁷R¹⁸ or -N(R¹⁷)-COOR¹⁸,

R²², R²³ and R²⁴ independently of one another each represent C₁-C₆-alkyl,

5

W¹ represents hydrogen, halogen, cyano, formyl, nitro, C₁-C₆-alkyl, tri-C₁-C₄-alkylsilyl, C₁-C₁₆-alkoxy, C₁-C₆-halogenoalkyl, C₁-C₆-halogenoalkoxy, C₂-C₆-halogenoalkenyloxy, C₁-C₆-alkylcarbonyl, C₁-C₁₆-alkoxycarbonyl, pentafluorothio or -S(O)_oR⁶,

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W² represents halogen, cyano, formyl, nitro, C₁-C₆-alkyl, tri-C₁-C₄-alkylsilyl, C₁-C₁₆-alkoxy, C₁-C₆-halogenoalkyl, C₁-C₆-halogenoalkoxy, C₁-C₆-alkylcarbonyl, C₁-C₁₆-alkoxycarbonyl, pentafluorothio, -S(O)_oR⁶ or -C(R¹⁷)=N-R²¹,

W³ represents halogen, cyano, nitro, C₁-C₄-alkyl, C₁-C₄-alkoxy, C₁-C₄-halogenoalkyl, C₁-C₄-halogenoalkoxy, di-C₁-C₄-alkylamino, -S(O)_oR⁶, -COOR²⁵ or -CONR²⁶R²⁷,

15

R²⁵ represents hydrogen, C₁-C₄-alkyl, C₁-C₄-halogenoalkyl, optionally halogen-, C₁-C₄-alkyl- or C₁-C₄-halogenoalkyl-substituted C₃-C₇-cycloalkyl or represents phenyl which is optionally mono- to pentasubstituted by radicals from the list W⁴,

20

R²⁶ and R²⁷ independently of one another each represent hydrogen, C₁-C₄-alkyl, C₃-C₆-alkenyl, C₁-C₄-halogenoalkyl, C₃-C₆-halogenoalkenyl, C₁-C₄-alkoxy, respectively optionally halogen-, C₁-C₄-alkyl- or C₁-C₄-halogenoalkyl-substituted C₃-C₆-cycloalkyl or C₃-C₆-cycloalkyl-C₁-C₄-alkyl or represent phenyl or phenyl-C₁-C₄-alkyl, each of which is optionally mono- to pentasubstituted by radicals from the list W⁴, represent -OR²² or -NR²³R²⁴, or together represent an alkylene chain having 4 to 6 members in which one methylene group is optionally replaced by oxygen, and

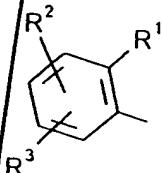
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W⁴ represents halogen, cyano, nitro, C₁-C₆-alkyl, C₁-C₆-alkoxy, C₁-C₆-halogenoalkyl, C₁-C₆-halogenoalkoxy, di-C₁-C₄-alkylamino, C₁-C₆-alkoxycarbonyl, di-C₁-C₆-alkylaminocarbonyl or -S(O)_oR⁶.

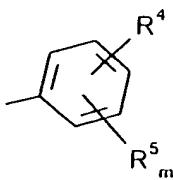
3. Compounds of the formula (I) according to Claim 1 in which

n represents 1 or 2,

Ar¹ represents the radical



Ar² represents the radical



m represents 0, 1 or 2,

10 R¹ represents fluorine, chlorine, bromine, C₁-C₆-alkyl, C₁-C₆-alkoxy, respectively fluorine- or chlorine-substituted C₁-C₆-alkyl or C₁-C₆-alkoxy, represents C₁-C₆-alkoxy-C₁-C₆-alkyl or -S(O)₀R⁶,

R² and R³ independently of one another each represent hydrogen, fluorine, chlorine, bromine, iodine, C₁-C₆-alkyl, C₁-C₆-alkoxy, respectively fluorine- or chlorine-substituted C₁-C₆-alkyl or C₁-C₆-alkoxy, represent C₁-C₆-alkoxy-C₁-C₆-alkyl or -S(O)₀R⁶,

15 R⁴ represents a substituent in meta- or paraposition from the group consisting of fluorine, chlorine, bromine, iodine, cyano, tri-(C₁-C₄-alkyl)-silyl, -CO-NR¹⁰R¹¹, tetrahydropyranyl or one of the groupings below

20

(I) -X-A

(m) -B-Z-D

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AB
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(n) -Y-E,

5 R⁵ represents hydrogen, fluorine, chlorine, bromine, iodine, cyano, nitro, C₁-C₁₆-alkyl, C₁-C₁₆-alkoxy, respectively fluorine- or chlorine-substituted C₁-C₆-alkyl or C₁-C₆-alkoxy, represents C₁-C₈-alkoxy-C₁-C₈-alkoxy, or -S(O)₀R⁶,

o represents 0, 1 or 2,

15 R⁶ represents C₁-C₄-alkyl or respectively fluorine- or chlorine-substituted methyl or ethyl,

R¹⁰ and R¹¹ independently of one another each represent hydrogen, C₁-C₆-alkyl, fluorine- or chlorine-substituted C₁-C₆-alkyl or represent phenyl or benzyl, each of which is optionally mono- or disubstituted by radicals from the list W¹,

20 X represents a direct bond, oxygen, sulphur, carbonyl, carbonyloxy, oxycarbonyl, C₁-C₄-alkylene, C₂-C₄-alkenylene, C₂-C₄-alkynylene, C₁-C₄-alkyleneoxy, C₁-C₄-oxyalkylene, C₁-C₄-thioalkylene, C₁-C₄-alkylenedioxy or di-C₁-C₄-alkylsilylene,

25 A represents phenyl, naphthyl or tetrahydronaphthyl, each of which is optionally mono- to trisubstituted by radicals from the list W¹, or represents 5- to 10-membered heterocyclyl having 1 to 4 hetero atoms, which includes 0 to 4 nitrogen atoms, 0 to 2 oxygen atoms and 0 to 2 sulphur atoms, and containing 1 or 2 aromatic rings, which is in each case optionally mono- to trisubstituted by radicals from the list W²,

B represents p-phenylene which is optionally mono- or disubstituted by radicals from the list W¹,

25 Z represents oxygen or sulphur,

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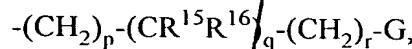


- AB
- D represents hydrogen, C₁-C₁₆-alkyl, C₂-C₁₆-alkenyl, C₂-C₆-alkinyl, respectively fluorine- or chlorine-substituted C₁-C₄-alkyl or C₂-C₄-alkenyl, represents C₃-C₆-cycloalkyl or C₃-C₆-cycloalkyl-C₁-C₄-alkyl, each of which is optionally substituted by fluorine, chlorine, bromine, C₁-C₄-alkyl, C₂-C₄-alkenyl, fluorine- or chlorine-substituted C₂-C₄-alkenyl, phenyl, styryl, respectively fluorine-, chlorine- or bromine-substituted phenyl or styryl, represents respectively optionally fluorine-, chlorine-, bromine- or C₁-C₄-alkyl-substituted C₅-C₆-cycloalkenyl or C₅-C₆-cycloalkenyl-C₁-C₄-alkyl, represents phenyl-C₁-C₄-alkyl, naphthyl-C₁-C₄-alkyl, tetrahydro-naphthyl-C₁-C₆-alkyl or 5- or 6-membered hetaryl-C₁-C₄-alkyl having 1 or 2 hetero atoms from the group consisting of nitrogen, oxygen and sulphur, each of these radicals being optionally substituted by nitro, fluorine, chlorine, bromine, C₁-C₆-alkyl, C₁-C₆-alkoxy, respectively fluorine- or chlorine-substituted C₁-C₄-alkyl or C₁-C₄-alkoxy, represents -CO-R¹², -CO-NR¹³R¹⁴, or the grouping
- (CH₂)_p-(CR¹⁵R¹⁶)_q-(CH₂)_r-G or
- Z and D together represent phenoxy-C₁-C₃-alkyl which is optionally substituted by nitro, fluorine, chlorine, bromine, C₁-C₄-alkyl, C₁-C₄-alkoxy or respectively fluorine- or chlorine-substituted C₁-C₄-alkyl or C₁-C₄-alkoxy,
- Y represents a direct bond, oxygen, sulphur, carbonyl, carbonyloxy, oxycarbonyl, C₁-C₄-alkylene, C₂-C₄-alkenylene, C₂-C₄-alkinylene, C₁-C₄-alkylenedioxy, C₁-C₄-oxyalkylene, C₁-C₄-thioalkylene, C₁-C₄-alkylenedioxy or represents p-phenylene which is optionally mono- or disubstituted by radicals from the list W¹,
- E represents hydrogen, C₁-C₁₆-alkyl, C₂-C₁₆-alkenyl, C₂-C₆-alkinyl, respectively fluorine- or chlorine-substituted C₁-C₄-alkyl or C₂-C₄-alkenyl, represents C₃-C₆-cycloalkyl which is optionally substituted by fluorine, chlorine, bromine, C₁-C₄-alkyl, C₂-C₄-alkenyl, fluorine- or chlorine-substituted C₂-C₄-alkenyl, phenyl, styryl or respectively fluorine-, chlorine- or bromine-substituted phenyl or styryl,

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represents optionally fluorine-, chlorine-, bromine- or C₁-C₄-alkyl-substituted C₅-C₆-cycloalkenyl, represents phenyl which is optionally mono- to trisubstituted by radicals from the list W¹ or represents 5- or 6-membered hetaryl having 1 or 2 hetero atoms from the group consisting of nitrogen, oxygen and sulphur, which is optionally mono- or disubstituted by radicals from the list W², or represents the grouping



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A3

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R¹² represents C₁-C₆-alkyl, C₁-C₆-alkoxy, C₂-C₆-alkenyl, C₂-C₆-alkenyl-oxy, represents C₃-C₆-cycloalkyl, C₃-C₆-cycloalkyloxy or C₃-C₆-cycloalkyl-C₁-C₂-alkyloxy, each of which is optionally substituted by fluorine, chlorine, C₁-C₃-alkyl, or respectively fluorine- or chlorine-substituted C₁-C₂-alkyl or C₂-C₃-alkenyl, or represents phenyl which is optionally mono- or disubstituted by fluorine, chlorine, bromine, iodine, C₁-C₄-alkyl, C₁-C₄-alkoxy or respectively fluorine- or chlorine-substituted, C₁-C₃-alkyl or C₁-C₄-alkoxy,

R¹³ represents hydrogen or C₁-C₄-alkyl,

20

R¹⁴ represents C₁-C₄-alkyl, or represents phenyl or benzyl, each of which is optionally mono- or disubstituted by fluorine, chlorine, bromine, C₁-C₄-alkyl or respectively fluorine- or chlorine-substituted C₁-C₄-alkyl or C₁-C₄-alkoxy,

p, q and r independently of one another each represent 0, 1, 2 or 3, their sum being smaller than 6,

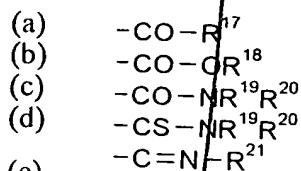
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R¹⁵ and R¹⁶ independently of one another each represent hydrogen or C₁-C₄-alkyl,

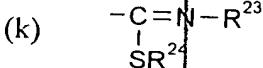
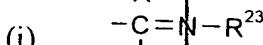
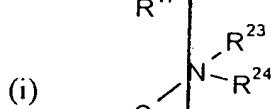
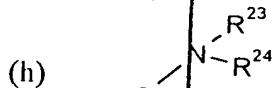
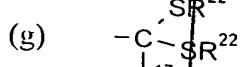
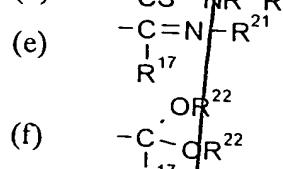
G represents cyano, represents a 5- or 6-membered heterocycle having 1 to 3 identical or different hetero atoms from the group consisting of nitrogen, oxygen and sulphur, which is optionally mono- to trisubstituted by fluorine, chlorine, bromine, C₁-C₄-alkyl or fluorine-

or chlorine-substituted C₁-C₄-alkyl and, at the attachment point, optionally by the radical R¹⁷, or represents one of the groupings below:

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R¹⁷ represents hydrogen, C₁-C₆-alkyl, C₂-C₆-alkenyl, respectively fluorine- or chlorine-substituted C₁-C₄-alkyl or C₂-C₆-alkenyl, represents C₃-C₆-cycloalkyl which is optionally substituted by fluorine, chlorine, C₁-C₄-alkyl or fluorine- or chlorine-substituted C₁-C₄-alkyl, or represents phenyl which is optionally mono- to tri-substituted by C₁-C₄-alkylcarbonylamino, C₁-C₄-alkylcarbonyl-C₁-C₄-alkylamino and/or radicals from the list W³,

20

R¹⁸ represents hydrogen, C₁-C₄-alkyl, C₃-C₆-alkenyl, respectively fluorine- or chlorine-substituted C₁-C₄-alkyl or C₃-C₆-alkenyl, represents C₃-C₆-cycloalkyl or C₃-C₆-cycloalkyl-C₁-C₄-alkyl, each of which is optionally substituted by fluorine, chlorine, C₁-C₄-alkyl

25

or fluorine- or chlorine-substituted C₁-C₄-alkyl, or represents phenyl-C₁-C₄-alkyl or naphthyl-C₁-C₄-alkyl, each of which is optionally mono- to trisubstituted by radicals from the list W³,

- 5 R¹⁹ and R²⁰ independently of one another each represent hydrogen, C₁-C₄-alkyl, C₃-C₆-alkenyl, respectively fluorine- or chlorine-substituted C₁-C₄-alkyl or C₃-C₆-alkenyl, represent C₁-C₄-alkoxy, represent C₃-C₆-cycloalkyl or C₃-C₆-cycloalkyl-C₁-C₄-alkyl, each of which is optionally substituted by fluorine, chlorine, C₁-C₄-alkyl or fluorine- or chlorine-substituted C₁-C₄-alkyl, represent phenyl or phenyl-C₁-C₄-alkyl, each of which is optionally mono- to trisubstituted by radicals from the list W³, represent -OR¹⁸ or -NR¹⁷R¹⁸ or together represent -(CH₂)₅- , -(CH₂)₆- or -(CH₂)₂-O-(CH₂)₂-,
- 10 AB
R²¹ represents -OR¹⁸, -NR¹⁷R¹⁸ or -N(R¹⁷)-COOR¹⁸,
- 15 R²², R²³ and R²⁴ independently of one another each represent C₁-C₄-alkyl,
- 20 W¹ represents hydrogen, fluorine, chlorine, bromine, iodine, cyano, formyl, nitro, C₁-C₄-alkyl, C₁-C₄-alkoxy, respectively fluorine- or chlorine-substituted C₁-C₄-alkyl or C₁-C₄-alkoxy, represents C₁-C₄-alkylcarbonyl, C₁-C₄-alkoxycarbonyl or -S(O)_oR⁶,
- 25 W² represents fluorine, chlorine, bromine, cyano, formyl, nitro, C₁-C₄-alkyl, C₁-C₄-alkoxy, respectively fluorine- or chlorine-substituted C₁-C₄-alkyl or C₁-C₄-alkoxy, represents C₁-C₄-alkylcarbonyl, C₁-C₄-alkoxycarbonyl, -S(O)_oR⁶ or -C(R¹⁷)=N-R²¹,
- W³ represents fluorine, chlorine, bromine, cyano, nitro, C₁-C₄-alkyl, C₁-C₄-alkoxy, respectively fluorine- or chlorine-substituted C₁-C₄-alkyl or C₁-C₄-alkoxy, represents di-C₁-C₄-alkylamino, -S(O)_oR⁶, -COOR²⁵ or -CONR²⁶R²⁷,
- 25 R²⁵ represents hydrogen, C₁-C₄-alkyl, fluorine- or chlorine-substituted C₁-C₄-alkyl, represents C₃-C₆-cycloalkyl which is optionally substituted by fluorine, chlorine, C₁-C₄-alkyl or fluorine- or

chlorine-substituted C₁-C₄-alkyl, or represents phenyl which is optionally mono- to trisubstituted by radicals from the list W⁴,

5

R²⁶ and R²⁷ independently of one another each represent hydrogen, C₁-C₄-alkyl, C₃-C₆-alkenyl, respectively fluorine- or chlorine-substituted C₁-C₄-alkyl or C₃-C₆-alkenyl, represent C₁-C₄-alkoxy, represent C₃-C₆-cycloalkyl or C₃-C₆-cycloalkyl-C₁-C₄-alkyl, each of which is optionally substituted by fluorine, chlorine, C₁-C₄-alkyl or fluorine- or chlorine-substituted C₁-C₄-alkyl, or represent phenyl or phenyl-C₁-C₄-alkyl, each of which is optionally mono- to trisubstituted by radicals from the list W⁴, represent -OR²² or -NR²³R²⁴ or together represent -(CH₂)₅-, -(CH₂)₆- or -(CH₂)₂-O-(CH₂)₂-, and

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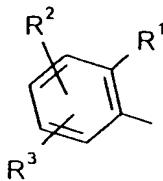
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W⁴ represents fluorine, chlorine, bromine, cyano, nitro, C₁-C₄-alkyl, C₁-C₄-alkoxy, respectively fluorine- or chlorine-substituted C₁-C₄-alkyl or C₁-C₄-alkoxy, di-C₁-C₄-alkylamino, C₁-C₄-alkoxy carbonyl, di-C₁-C₆-alkylaminocarbonyl or -S(O)₀R⁶.

4. Compounds of the formula (I) according to Claim 1 in which

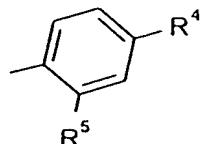
n represents 1 or 2,

Ar¹ represents the radical



20

Ar² represents the radical



- R¹ represents fluorine, chlorine, bromine, methyl, ethyl, n-propyl, isopropyl, n-butyl, isobutyl, sec-butyl, tert-butyl, methoxy, ethoxy, n-propoxy, isopropoxy, n-butoxy, isobutoxy, sec-butoxy, tert-butoxy,
- 5 R² and R³ independently of one another each represent hydrogen, fluorine, chlorine, bromine, methyl, ethyl, n-propyl, isopropyl, n-butyl, isobutyl, sec-butyl, tert-butyl, methoxy, ethoxy, n-propoxy, isopropoxy, n-butoxy, isobutoxy, sec-butoxy, tert-butoxy,
- 10 R⁴ represents a substituent in meta- or paraposition from the group consisting of fluorine, chlorine, bromine, iodine, cyano, -CO-NR¹⁰R¹¹, tetrahydropyranyl or one of the groupings below
- (l) -X—A
- (m-a)
 A benzene ring with a vertical line extending from its top position labeled "Z-D". From the adjacent position (ortho), another vertical line extends downwards labeled "W¹".
- (n) -Y—E ,
- 15 R⁵ represents hydrogen, fluorine, chlorine, bromine, methyl, ethyl, methoxy, ethoxy, methylthio, ethylthio, trifluoromethyl, difluoromethoxy, trifluoromethoxy or trifluoromethylthio,
- o represents 0 or 2,
- R⁶ represents methyl, ethyl, n-propyl, isopropyl, difluoromethyl or trifluoromethyl,
- 20 R¹⁰ and R¹¹ independently of one another each represent hydrogen, methyl, ethyl, n-propyl, isopropyl, n-butyl, isobutyl, sec-butyl, tert-butyl or represent phenyl or benzyl, each of which is optionally monosubstituted by a radical from the list W¹,
- 25 X represents a direct bond, oxygen, sulphur, carbonyl, -CH₂- , -(CH₂)₂- , -CH=CH- (E or Z), -C≡C-, -CH₂O-, -(CH₂)₂O-,

-CH(CH₃)O-, -OCH₂-, -O(CH₂)₂-, -SCH₂-, -S(CH₂)₂-, -SCH(CH₃)-,
 C₁-C₄-alkylenedioxy, in particular -OCH₂O-, -O(CH₂)₂O- or
 -OCH(CH₃)O-,

- AB
- 5 A represents phenyl which is optionally mono- or disubstituted by radicals from the list W¹ or represents furyl, benzofuryl, thienyl, benzothienyl, oxazolyl, benzoxazolyl, thiazolyl, benzthiazolyl, pyrrolyl, pyridyl, pyrimidyl, 1,3,5-triazinyl, quinolinyl, isoquinolinyl, indolyl, purinyl, benzodioxolyl, indanyl, benzodioxanyl or chromanyl, each of which is optionally mono- or disubstituted by radicals from the list W²,
- 10 Z represents oxygen or sulphur,
- 15 D represents hydrogen, methyl, ethyl, n-propyl, isopropyl, n-butyl, isobutyl, sec-butyl, tert-butyl, the isomeric pentyls, the isomeric hexyls, n-heptyl, n-octyl, n-isooctyl, n-nonyl, n-decyl, n-undecyl, n-dodecyl, n-tridecyl, n-tetradecyl, n-pentadecyl, n-hexadecyl, 2-propenyl, butenyl, pentenyl, hexenyl, propargyl, butinyl, pentinyl, -CF₃, -CHF₂, -CClF₂, -CF₂CHFCI, -CF₂CH₂F, -CF₂CHF₂, -CF₂CCl₃, -CH₂CF₃, -CF₂CHFCF₃, -CH₂CF₂CHF₂, -CH₂CF₂CF₃, represents cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, cyclopropylmethyl, cyclobutylmethyl, cyclopentylmethyl or cyclohexylmethyl, each of which is optionally mono- to trisubstituted by fluorine, chlorine, bromine, methyl, ethyl, n-propyl, isopropyl, n-butyl, isobutyl, sec-butyl, tert-butyl, ethenyl, 1-propenyl, 2,2-dimethylethenyl, -CH=CCl₂, phenyl, styryl, respectively fluorine-, chlorine- or bromine-substituted phenyl or 4-chlorostyryl, represents respectively optionally fluorine-, chlorine-, methyl-, ethyl-, n-propyl-, isopropyl-, n-butyl-, isobutyl-, sec-butyl- or tert-butyl-substituted cyclopentenyl, cyclohexenyl, cyclohexenylmethyl or cyclopentenylmethyl, represents benzyl, phenethyl, naphthylmethyl, tetrahydronaphthylmethyl, furylmethyl, thienuylmethyl, pyrrolylmethyl, oxazolylmethyl, isoxazolylmethyl, thiazolylmethyl or pyridylmethyl, each of which is optionally mono- or disubstituted by nitro, fluorine, chlorine, bromine, methyl, ethyl, n-propyl,
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- 25
- 30

isopropyl, n-butyl, isobutyl, sec-butyl, tert-butyl, methoxy, ethoxy, n-propoxy, isopropoxy, n-butoxy, isobutoxy, sec-butoxy, tert-butoxy, trifluoromethyl, trifluoromethoxy, difluoromethoxy or chlorodifluoromethoxy, represents -CO-R¹², -CO-NR¹³R¹⁴ or the grouping

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$$-(\text{CH}_2)_p - (\text{CR}^{15}\text{R}^{16})_q - (\text{CH}_2)_r - \text{G}$$

AB

Z and D together represent phenoxy methyl which is optionally mono- or disubstituted by nitro, fluorine, chlorine, bromine, methyl, ethyl, n-propyl, isopropyl, methoxy, ethoxy, n-propoxy, isopropoxy, trifluoromethyl, trifluoromethoxy, difluoromethoxy or chlorodifluoromethoxy,

Y represents a direct bond, oxygen, sulphur, carbonyl, $-\text{CH}_2-$, $-(\text{CH}_2)_2-$, $-\text{CH}=\text{CH}-$ (E or Z), $-\text{C}\equiv\text{C}-$, $-\text{CH}_2\text{O}-$, $-(\text{CH}_2)_2\text{O}-$, $-\text{CH}(\text{CH}_3)\text{O}-$, $-\text{OCH}_2-$, $-\text{O}(\text{CH}_2)_2-$, $-\text{SCH}_2-$, $-\text{S}(\text{CH}_2)_2-$, $-\text{SCH}(\text{CH}_3)-$, $\text{C}_1\text{-C}_4$ -alkylenedioxy, in particular $-\text{OCH}_2\text{O}-$ or $-\text{O}(\text{CH}_2)_2\text{O}-$ or represents p-phenylene which is optionally monosubstituted by a radical from the list W^1 ,

15

E represents hydrogen, methyl, ethyl, n-propyl, isopropyl, n-butyl, isobutyl, sec-butyl, tert-butyl, the isomeric pentyls, the isomeric hexyls, n-heptyl, n-octyl, n-isoctyl, n-nonyl, n-decyl, n-undecyl, n-dodecyl, n-tridecyl, n-tetradecyl, n-pentadecyl, n-hexadecyl,

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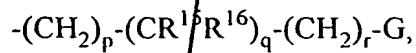
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represents hydrogen, methyl, ethyl, n-propyl, isopropyl, n-butyl, isobutyl, sec-butyl, tert-butyl, the isomeric pentyls, the isomeric hexyls, n-heptyl, n-octyl, n-isoctyl, n-nonyl, n-decyl, n-undecyl, n-dodecyl, n-tridecyl, n-tetradecyl, n-pentadecyl, n-hexadecyl, 2-propenyl, butenyl, pentenyl, hexenyl, propargyl, butinyl, pentinyl, -CF₃, -CHF₂, -CClF₂, -CF₂CHFCI, -CF₂CH₂F, -CF₂CHF₂, -CF₂CCl₃, -CH₂CF₃, -CF₂CHFCF₃, -CH₂CF₂CHF₂, -CH₂CF₂CF₃, represents cyclopropyl, cyclobutyl, cyclopentyl or cyclohexyl, each of which is optionally mono- to trisubstituted by fluorine, chlorine, bromine, methyl, ethyl, n-propyl, isopropyl, n-butyl, isobutyl, sec-butyl, tert-butyl, ethenyl, 1-propenyl, 2,2-dimethylethenyl, -CH=CCl₂, phenyl, styryl, respectively fluorine-, chlorine- or bromine-substituted phenyl or by 4-chlorostyryl, represents respectively optionally fluorine-, chlorine-, methyl-, ethyl-, n-propyl-, isopropyl-, n-butyl-, isobutyl-, sec-butyl- or tert-butyl-substituted cyclopentenyl or cyclohexenyl, represents phenyl which

is optionally mono- or disubstituted by radicals from the list W¹, represents furyl, thienyl, pyrrolyl, oxazolyl, isoxazolyl, thiazolyl or pyridyl, each of which is optionally mono- or disubstituted by radicals from the list W², or represents the grouping

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R¹² represents methyl, ethyl, n-propyl, isopropyl, n-butyl, isobutyl, sec-butyl, tert-butyl, methoxy, ethoxy, n-propoxy, isopropoxy, n-butoxy, isobutoxy, sec-butoxy, tert-butoxy, cyclopropyl, cyclohexyl, cyclohexyloxy, cyclohexylmethoxy, phenyl, 2-chlorophenyl, 3-chlorophenyl, 2,6-difluorophenyl, 2,4-dichlorophenyl, 3,4-dichlorophenyl, 2-trifluoromethoxyphenyl or 4-trifluoromethoxyphenyl,

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R¹³ represents hydrogen,

R¹⁴ represents methyl, ethyl or represents phenyl which is optionally monosubstituted by chlorine,

p, q and r independently of one another each represent 0, 1, 2 or 3, their sum being smaller than 4,

R¹⁵ and R¹⁶ independently of one another each represent hydrogen, methyl, ethyl, n-propyl, isopropyl, n-butyl, isobutyl, sec-butyl, tert-butyl,

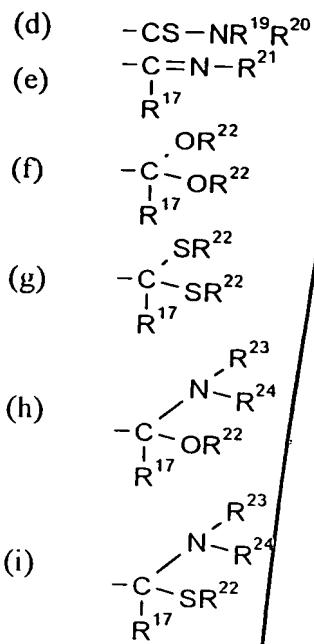
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G represents cyano, represents 5,6-dihydrodioxazin-2-yl, 3-pyridyl, 3-furyl, 3-thienyl, 2-thiazolyl, 5-thiazolyl, 2-dioxolanyl, 1,3-dioxan-2-yl, 2-dithiolanyl, 1,3-dithian-2-yl or 1,3-thioxan-2-yl, each of which is optionally mono- to trisubstituted by fluorine, chlorine, bromine, methyl, ethyl, n-propyl, isopropyl or trifluoromethyl and, at the attachment point, optionally by the radical R¹⁷, or represents one of the groupings below:

25

- (a) -CO-R¹⁷
- (b) -CO-OR¹⁸
- (c) -CO-NR¹⁹R²⁰

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10 R^{17} represents hydrogen, methyl, ethyl, n-propyl, isopropyl, n-butyl, isobutyl, sec-butyl, tert-butyl, the isomeric pentyls, the isomeric hexyls, $-\text{CF}_3$, $-\text{CHF}_2$, $-\text{CClF}_2$, $-\text{CF}_2\text{CHFCI}$, $-\text{CF}_2\text{CH}_2\text{F}$, $-\text{CF}_2\text{CHF}_2$, $-\text{CF}_2\text{CCl}_3$, $-\text{CH}_2\text{CF}_3$, $\text{C}_3\text{-C}_6$ -alkenyl, $\text{C}_3\text{-C}_6$ -alkenyl which is mono- to trisubstituted by fluorine or chlorine, represents cyclopropyl, cyclopentyl or cyclohexyl, each of which is optionally mono- or disubstituted by fluorine, chlorine, methyl, ethyl, n-propyl, isopropyl, $-\text{CF}_3$, $-\text{CHF}_2$, $-\text{CClF}_2$, $-\text{CF}_2\text{CHFCI}$, $-\text{CF}_2\text{CH}_2\text{F}$, $-\text{CF}_2\text{CHF}_2$, $-\text{CF}_2\text{CCl}_3$ or $-\text{CH}_2\text{CF}_3$, or represents phenyl which is optionally mono- or disubstituted by methylcarbonylamino, ethylcarbonylamino, methylcarbonyl-methylamino and/or radicals from the list W³,

15 R^{18} represents hydrogen, methyl, ethyl, n-propyl, isopropyl, n-butyl, isobutyl, sec-butyl, tert-butyl, $-\text{CH}_2\text{CF}_3$, allyl, represents cyclopropyl, cyclopentyl, cyclohexyl, cyclopropylmethyl, cyclopentylmethyl, cyclohexylmethyl, cyclopropylethyl, cyclopentylethyl or cyclohexylethyl, each of which is optionally mono- or disubstituted by fluorine, chlorine, methyl, ethyl, n-propyl, isopropyl, $-\text{CF}_3$, $-\text{CHF}_2$, $-\text{CClF}_2$, $-\text{CF}_2\text{CHFCI}$, $-\text{CF}_2\text{CH}_2\text{F}$, $-\text{CF}_2\text{CHF}_2$, $-\text{CF}_2\text{CCl}_3$ or $-\text{CH}_2\text{CF}_3$, or represents benzyl or

phenethyl, each of which is optionally mono- or disubstituted by radicals from the list W³,

R^{19} and R^{20} independently of one another each represent hydrogen, methyl, ethyl, n-propyl, isopropyl, n-butyl, isobutyl, sec-butyl, tert-butyl, $-CH_2CF_3$, methoxy, ethoxy, allyl, represent cyclopropyl, cyclopentyl, cyclohexyl, cyclopropylmethyl, cyclopentylmethyl or cyclohexylmethyl, each of which is optionally mono- or disubstituted by fluorine, chlorine, methyl, ethyl, n-propyl, isopropyl or trifluoromethyl, represent phenyl, benzyl or phenethyl, each of which is optionally mono- or disubstituted by radicals from the list W^3 , represent $-OR^{18}$ or $-NR^{17}R^{18}$,

R^{21} represents $-OR^{18}$, $-NR^{17}R^{18}$ or $-N(R^{17})-COOR^{18}$,

R^{22} , R^{23} and R^{24} independently of one another each represent methyl, ethyl, n-propyl or isopropyl.

^{W¹} represents hydrogen, fluorine, chlorine, bromine, cyano, formyl, nitro, methyl, ethyl, n-propyl, isopropyl, n-butyl, isobutyl, sec-butyl, tert-butyl, methoxy, ethoxy, n-propoxy, isopropoxy, n-butoxy, isobutoxy, sec-butoxy, tert-butoxy, -CF₃, -CHF₂, -CClF₂, -CF₂CHFCI, -CF₂CH₂F, -CF₂CHF₂, -CF₂CCl₃, -CH₂CF₃, -CF₂CHFCF₃, -CH₂CF₂CHF₂, -CH₂CF₂CF₃, trifluoromethoxy, difluoromethoxy, chlorodifluoromethoxy, acetyl, propionyl, butyryl, isobutyryl, methoxycarbonyl, ethoxycarbonyl, n-propoxycarbonyl, isopropoxycarbonyl, n-butoxycarbonyl, isobutoxycarbonyl, sec-butoxycarbonyl, tert-butoxycarbonyl or -S(O)_nR⁶,

25 W² represents fluorine, chlorine, bromine, cyano, methyl, ethyl, n-propyl, isopropyl, trifluoromethyl, trifluoromethoxy, difluoromethoxy, chlorodifluoromethoxy, acetyl, trifluoromethylthio, -CH=N-OCH₃, -CH=N-OC₂H₅, -CH=N-OC₃H₇, -C(CH₃)=N-OCH₃,
30 -C(CH₃)=N-OC₂H₅, -C(CH₃)=N-OC₃H₇, -C(C₂H₅)=N-OCH₃,
-C(C₂H₅)=N-OC₂H₅ or -C(C₂H₅)=N-OC₃H₇.

W³ represents fluorine, chlorine, cyano, nitro, methyl, ethyl, methoxy, ethoxy, methylthio, trifluoromethyl, trifluoromethoxy, trifluoromethylthio, dimethylamino, diethylamino, -COOR²⁵ or -CONR²⁶R²⁷,

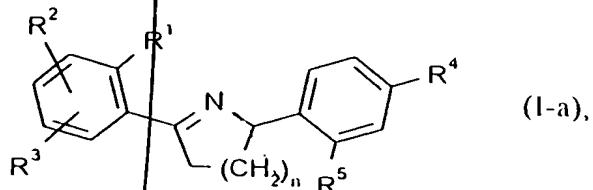
5 R²⁵ represents hydrogen, methyl, ethyl, n-propyl, isopropyl, tert-butyl, -CH₂CF₃, represents cyclopropyl, cyclopentyl or cyclohexyl, each of which is optionally mono- or disubstituted by fluorine, chlorine, methyl, ethyl, n-propyl, isopropyl or -CF₃, or represents phenyl which is optionally mono- or disubstituted by radicals from the list W⁴,

B
15

R²⁶ and R²⁷ independently of one another each represent hydrogen, methyl, ethyl, n-propyl, isopropyl, n-butyl, isobutyl, sec-butyl, tert-butyl, -CH₂CF₃, methoxy, ethoxy, allyl, represent cyclopropyl, cyclopentyl, cyclohexyl, cyclopropylmethyl, cyclopentylmethyl or cyclohexylmethyl, each of which is optionally mono- or disubstituted by fluorine or chlorine, represent phenyl, benzyl or phenethyl, each of which is optionally mono- or disubstituted by radicals from the list W⁴, represent -OR²² or -NR²³R²⁴, and

20 W⁴ represents fluorine, chlorine, bromine, cyano, nitro, methyl, ethyl, tert-butyl, methoxy, ethoxy, methylthio, trifluoromethyl, trifluoromethoxy or trifluoromethylthio.

5. Compounds of the formula (I-a)



in which

25 R¹, R², R³, R⁵ and n are each as defined in Claim 1,

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R^4 represents phenyl which is mono- or disubstituted by radicals from the list W^1 , or represents one of the following groupings

- (m-b) $-B-O-D$
- (l) $-Y-E$,

5 B represents p-phenylene which is optionally monosubstituted by radicals from the list W^1 ,

Y represents a direct bond or represents p-phenylene which is optionally mono- or disubstituted by radicals from the list W^1 , and

D and E each have the very particularly preferred meanings mentioned in Claim 4 where

G is cyano or one of the groupings below

- (a) $-CO-R^{17}$
- (e) $-C=N-\overset{R^{21}}{R^{17}}$

where

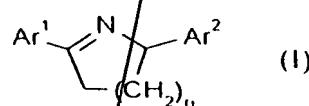
15 R^{17} and R^{21} are each as defined in Claim 1 and

W^1 is as defined in Claim 1.

6. Process for preparing compounds of the formula (I) according to Claim 1, characterized in that

A). compounds of the formula (I)

20

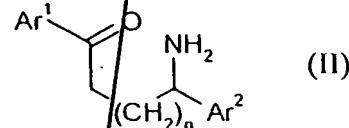


in which

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Ar^1 , Ar^2 and n are each as defined in Claim 1

are obtained by cyclocondensing compounds of the formula (II)



in which

5

Ar^1 , Ar^2 and n are each as defined above,

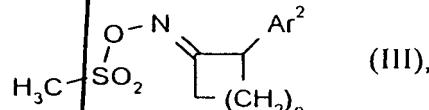
AB

or preferably acidic salts thereof, optionally in the presence of an acid binder,

or

B) compounds of the formula (III)

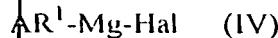
10



in which

Ar^2 and n are each as defined above

are reacted with aryl Grignard compounds of the formula (IV)



15

in which

Ar^1 is as defined above and

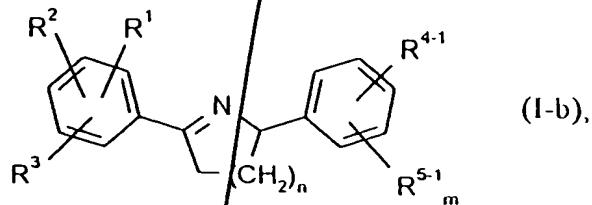
Hal represents chlorine, bromine or iodine,

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in the presence of a diluent, or

C) compounds of the formula (I-b)



in which

5 R¹, R², R³, n and m are each as defined above,

R⁴⁻¹ represents A or one of the groupings below

(m) -B-Z-D



where

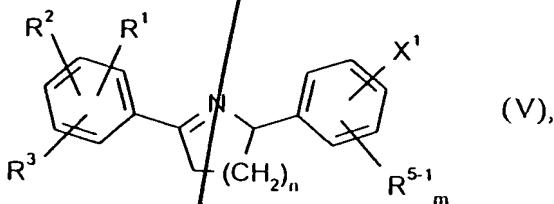
10 A, B, D, E, W¹ and Z are each as defined above and

R⁵⁻¹ represents hydrogen, fluorine, cyano, nitro, alkyl, alkoxy, halogenoalkyl, halogenoalkoxy, alkoxyalkoxy or -SR⁶ where

R⁶ is as defined above

are obtained by coupling compounds of the formula (V)

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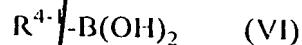


in which

R¹, R², R³, R⁵⁻¹, n and m are each as defined above and

X¹ represents bromine, iodine or -OSO₂CF₃

with boronic acids of the formula (VI)



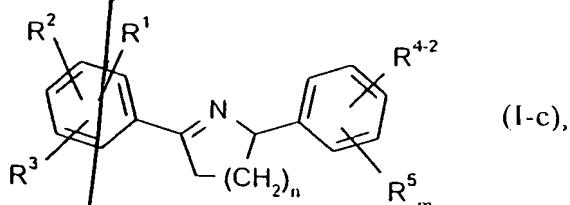
in which

R⁴⁻¹ is as defined above,

in the presence of a catalyst and in the presence of an acid binder
and in the presence of a solvent,

10

D) compounds of the formula (I-c)



in which

R¹, R², R³, R⁵, n and m are each as defined above,

15

R⁴⁻² represents one of the groupings below

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- (m-b) -B-Z-D
(n-b) -Y¹-E¹

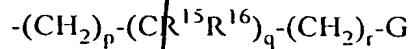
in which

B and Z are as defined above,

5

Y¹ represents oxygen or sulphur and

D¹ and E¹ each represent the grouping

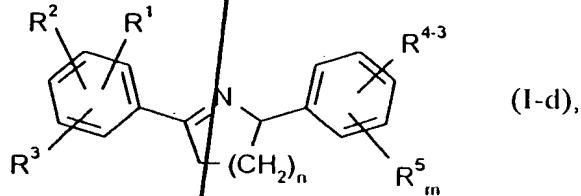


in which

R¹⁵, R¹⁶, G, p, q and r are each as defined above

10

are obtained by condensing compounds of the formula (I-d)



in which

R¹, R², R³, R⁵, n and m are each as defined above and

R⁴⁻³ represents one of the groupings below

15

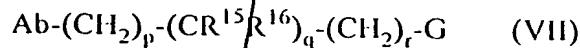
- (m-c) -B-Z-H
(n-c) -Y¹-H

in which

B, Y¹ and Z are each as defined above

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with compounds of the formula (VII)



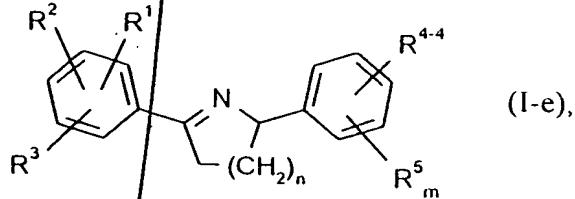
in which

 R^{15} , R^{16} , G , p , q and r are each as defined above and5 Ab represents a leaving group,

or

E) compounds of the formula (I-e)

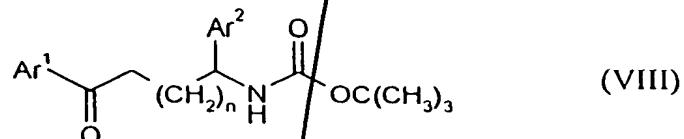
AB



in which

10 R^1 , R^2 , R^3 , R^5 , n and m are each as defined above and R^{4-4} represents a grouping from the description of the compounds of the formula (I) according to the invention containing the radical G where15 G represents one of the abovementioned groupings (e) to (k)are obtained by customary and known derivatization of the corresponding keto derivatives, carboxylic acid derivatives or nitriles, ie. compounds of the formula (I) in which G represents cyano or one of the groupings (a) to (d).

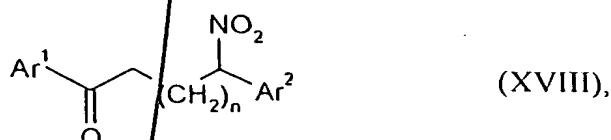
20 7. Compounds of the formula (VIII)



in which

Ar^1 , Ar^2 and n are each as defined in Claim 1.

8. Compounds of the formula (XVIII)



in which

Ar^1 , Ar^2 and n are each as defined in Claim 1.

9. Pesticides, characterized by a content of at least one compound of the formula (I) according to Claim 1.

10. 10. Use of compounds of the formula (I) according to Claim 1 for controlling pests.

11. Method for controlling pests characterized in that compounds of the formula (I) according to Claim 1 are allowed to act on pests and/or their habitat.

12. Process for preparing pesticides, characterized in that compounds of the formula (I) according to Claim 1 are mixed with extenders and/or surface-active agents.

13. Use of compounds of the formula (I) according to Claim 1 for preparing pesticides.